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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/667,378	09/23/2003	Yusuke Ishihara	Q77002	9206	
	7590 11/06/2007	EXAMINER			
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			HAUGLAND, SCOTT J		
			ART UNIT	PAPER NUMBER	
WASHINGTO	N, DC 20037		3654		
•			MAIL DATE	DELIVERY MODE	
		11/06/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application	No.	Applicant(s)				
Office Action Summary		10/667,378		ISHIHARA, YUSUKE				
		Examiner		Art Unit				
		Scott Haugla	and ·	3654				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed on 20 A	uaust 2007.						
•	This action is <b>FINAL</b> . 2b) This action is non-final.							
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
٠,۵	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4)⊠ Claim(s) <u>1-6,8 and 11-16</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.							
· · · · · · · · · · · · · · · · · · ·	6)⊠ Claim(s) <u>1-6,8 and 11-16</u> is/are rejected.							
-	Claim(s) is/are objected to.							
8)	Claim(s) are subject to restriction and/c	or election req	luirement.		·			
Applicati	on Papers							
9)□	The specification is objected to by the Examine	er.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
	Replacement drawing sheet(s) including the correct				FR 1.121(d).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. § 119								
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:								
1.⊠ Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)								
	e of References Cited (FTO-692) e of Draftsperson's Patent Drawing Review (PTO-948)		Paper No(s)/Mail Da	ite				
	mation Disclosure Statement(s) (PTO/SB/08) or No(s)/Mail Date		i)	Informal Patent Application				

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6, 8, and 11-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the peripheral surface side of the reel hub" on lines 21-22. Claim 11 recited this language on lines 11-12 and claim 14 recites it on lines 16-17. There is insufficient antecedent basis for this limitation in the claims. There is antecedent for "the inner peripheral surface side of the reel hub".

The language of claim 1, lines 21-22, claim 11, lines 11-12, and claim 14, lines 16-17 is unclear since the entire taper wall is located on the inner peripheral surface side of the reel hub (as opposed to the outer side of the hub). Since the taper wall is not disclosed as extending to the inner peripheral surface of the hub, it appears that this language is intended to require that the taper wall is continuously inclined to the radially outer edge of the taper wall.

#### **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

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unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6, 8, and 11-16 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,462,905 in view of either of Laverriere (EP Appl. No. 0284687 - note U.S. equivalent Pat No. 6,896,217).

Claims 1-4 of U.S. Patent No. 6,462,905 include a recording tape cartridge comprising: a reel 2 which is accommodated in a case 3, gear teeth 29, a braking member 4, a braking gear 42 on one surface of the braking member, and a taper wall (guide member) 39. The taper wall is located along a circumference which has a greater diameter than an outer diameter of the braking member and which is substantially coaxial with the reel hub since the taper wall inclines from the inner surface of the reel hub (claim 2) and centers the braking member (claim 1).

Claims 1-4 of U.S. Patent No. 6,462,905 do not claim that the gear teeth 29 are provided along a circumference which is substantially coaxial with a reel hub 21, that the braking member 4 is formed in a disc-shape, or that the gear teeth and taper walls are radially aligned.

Laverriere teaches providing a tape reel with a taper wall integral with a reel hub on a floor portion of the hub in radial alignment with gear teeth to align and guide a braking member 60 into engagement with gear teeth on the hub, arranging gear teeth (on 80) along a circumference which is substantially coaxial with a reel hub 66 and teaches forming a braking member 60 in a disc-shape.

It would have been obvious to one having ordinary skill in the art to arrange the gear teeth in the cartridge claimed in claims 1-4 of U.S. Patent No. 6,462,905 in radial alignment with the taper walls and along a circumference which is substantially coaxial with the reel hub and to form the braking member in a disc-shape as taught by Laverriere to facilitate forming of the taper walls and gear teeth and so that the braking gear and hub gear teeth align properly to permit engagement regardless of the angular position of the reel.

The method recited in claims 11-16 is inherent in the manufacture of the cartridge as modified.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, 8, and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (U.S. Pat. No. 6,462,905) in view of Laverriere (EP Appl. No. 0284687 - note U.S. equivalent Pat No. 6,896,217).

Takahashi et al discloses a recording tape cartridge comprising: a reel 2 which is accommodated in a case 3, gear teeth 29 provided along a circumference which is substantially coaxial with a reel hub 21 around which a recording tape is wound at a floor portion of the reel hub, a braking member 4 formed in a disc-shape, a braking gear 42 on one surface of the braking member, and a taper wall 39 continuously tapered from the gear teeth and standing erect at the floor portion along a circumference which has a greater diameter than an outer diameter of the braking member and which is substantially coaxial with the reel hub.

Takahashi et al does not disclose that the taper walls are radially aligned with the gear teeth.

Laverriere teaches providing a tape reel with a taper wall integral with a reel hub on a floor portion of the hub in radial alignment with gear teeth to align and guide a braking member 60 into engagement with gear teeth on the hub.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the gear teeth and taper walls of Takahashi et al radially aligned as taught by Laverriere to facilitate forming the gear teeth and taper walls.

The method recited in claims 11-16 is inherent in the manufacture of the modified cartridge of Ishikawa et al.

#### Response to Arguments

Applicant's arguments filed 8/20/07 have been fully considered but they are not persuasive.

Applicant argues that Takahashi does not disclose a taper wall standing erect at the floor portion of a hub along a circumference which has a greater diameter than an outer diameter of the braking member and which is substantially coaxial with the reel hub as recited in claim 1. However, as shown in Fig. 2 of Takahashi, for example, the taper walls 39 are located at a circumference which has a greater diameter than an outer diameter of the braking member 4. The circumference is arranged coaxially with the reel hub as can be seen in Fig. 3. The taper walls 39 stand erect at a floor portion of hub 21 (Fig. 2). Gear teeth 29 are located on a plurality of projections. The taper wall, projections, and gear teeth are all integral and unitary as indicated in the drawings. The taper walls are continuously inclined from an end of the gear teeth to a peripheral surface of the hub (Fig. 2). Laverriere discloses taper walls 70' that also function to align a braking member with gear teeth and teaches placing them in radial alignment with gear teeth.

#### Conclusion

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. The new grounds of rejection were necessitated by the amendments to claims 1, 11, and 14. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Mon. - Fri., 10:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (571) 272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Supervisory Patent Examiner **Technology Center 3600** 

11/1/07

AMENDMENT UNDER 37 C.F.R. § 1.111

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Attorney Docket No.: Q77002

STATEMENT OF SUBSTANCE OF INTERVIEW

Applicant thanks the Examiner for the courtesies extended to Applicant's representative

during the personal interview conducted with the examiner on August 16, 2007.

During the interview, the Examiner and Applicant's representative discussed at great

length the objection to the drawings, the Double Patenting rejection; the 35 U.S.C. § 102(e)

rejection and the 35 U.S.C. § 103(a) rejection.

With respect to the objection to the drawings (and the related 35 U.S.C. § 112 rejection),

the Examiner agreed that amending claim 3 to change the term "annular" to "arc shape" would

overcome the objection to the drawings and the § 112 rejection.

With respect to the Double Patenting rejection, Applicant submitted that the claimed

subject matter in the instant application is patentably distinct from the subject matter in the

commonly owned patents. However, the Examiner maintained his position and asserted that the

claimed subject matter is an obvious variation over the claims of Takahashi and the teachings of

Ishikawa. However, the Examiner recommended amending the independent claims to include

the feature "wherein the tapered wall is radially aligned with the gear teeth". The Examiner

stated that this amendment should be enough to overcome the Double Patenting rejection.

With respect to the prior art rejections, the Examiner firmly maintained his position as

outlined in the Office Action dated April 19, 2007, but suggested that amending the independent

claims to recite the feature "wherein the tapered wall is continuously inclined from an end of the

gear teeth to the peripheral surface side of the reel hub" may be enough to overcome the prior art

rejections

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